



**PRICING METHODOLOGY DISCLOSURE 2022/23**

**28 February 2022**

## Revision Overview

Date	Version	Changes
28/2/13	1.0	Initial publication
27/2/14	2.0	New section on charge structure. Revisions to cost allocators; introduced new standard charge for residential and small scale distributed generation customers; structural changes made to posted discount and merged customer groups for 400V customers with a fuse capacity above 160amps.
19/1/15	3.0	Revision to 'Customer Groups' section and associated illustration following changes in customer group terminology, criteria and structure; revision to cost allocators and associated tables in the 'Cost Model' section; Revision to 'Key Statistics and Assumptions', 'Price changes' and 'Consultation' section following 2015/16 price changes.
23/2/16	4.0	Revisions to section 6 to reflect the introduction of smart pricing and clarify the description of our price structure. Other minor revisions have been made throughout to adopt standard industry terms and improve readability.
23/2/17	5.0	Revision to section 6 to include the introduction of a customer nominated capacity charge and an excess demand charge for Large Customers. Update of WEL's pricing strategy in section 13 and the inclusion of WEL's Road Map for future pricing.
21/2/18	6.0	Update of Figure 1 - 'Customer groups' to reflect new structure and price categories. Section 7.2 'Posted Discount' removed. Section 13.1 'Changes to the Pricing Strategy' removed. Table 7 - 'WEL Future Pricing Road Map' removed.
20/2/19	7.0	Sections 4 and 14.2 to reflect no pricing structural changes.
18/2/20	8.0	Revisions to section: 3 to incorporate the new distribution pricing principles, 4, 5, and 6 to incorporate structural pricing changes, 11 to incorporate removal of SSDG price categories, 12 and 13 to outline consistency with new pricing principles, 14 to discuss most recent retailer consultation.
26/2/21	9.0	Revisions to sections: 4, 7, 9, and 13, and tables 3, 5, and 6. Incorporated the reintroduction of the discount.
28/2/22	10.0	Updates and revisions to sections: 4, 5, 7.2, 8, 9, 13.2, and 14.1, and tables 3, 4, 5, and 6. Incorporated WEL's Pricing Reform Roadmap.

## EXECUTIVE SUMMARY

This Pricing Methodology sets out the approach used by WEL Networks Ltd (WEL) to determine our price structure and set our prices for 2022/23. It has been prepared to meet the requirements of the Commerce Commission's *Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012*, and it has been prepared in accordance with the Electricity Authority's updated *Distribution Pricing: Practice Note December 2021*. In determining our prices, WEL has also had regard to the requirements of the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004*, and the consultation requirements in the *Electricity Industry Participation Code 2010*.

WEL has set prices for the year beginning 1 April 2022 based on an allocation to customer groups of the costs of owning and operating its network. The customer groups determined by WEL are based on the level of service received by the customer, which is in turn determined by their demand profile and associated asset requirements. WEL uses the following criteria to distinguish between levels of service received by our customers:

- The voltage at which the customer is connected;
- The customer's fuse capacity;
- For small customers (connected at 400V, with a fuse capacity of less than 110kVA) the principal use of their property; and
- For a customer's principal place of residence, whether the customer has chosen their retailer's low user pricing plan.

Our cost allocation model uses cost drivers such as annual energy consumption and measures of peak demand to allocate costs to customer groups. These allocators were chosen based on WEL's assessment of each customer group's influences on costs, such as investment, maintenance, and transmission charges. WEL has focused on matching an allocator to each of the cost categories in a manner that best reflects the Electricity Authority's pricing principle 'Prices signal the economic costs of supply', subject to the availability of information, administrative simplicity, and regulatory compliance.

While our cost allocation model is an important factor in setting prices, it is not simply a mechanical exercise of applying the model annually as this could lead to volatility in prices. Other factors that influence our approach to pricing include: ensuring customers do not experience excessive price shocks, ensuring revenue adequacy, and maintaining logical relationships between price categories. WEL also has a small number of customers with individual pricing agreements, reflecting the cost of assets used specifically by those customers.

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## 1. BACKGROUND

The core business of WEL is the provision of electricity distribution services in the Waikato region. As an electricity distribution company, WEL owns and maintains the electricity network of lines, cables, substations, and associated infrastructure. Our network connects over 97,000 customers (a small number of whom are generators) to the national transmission and generation facilities and includes more than 6,900 kilometres of lines and has an annual throughput of over 1,280GWh. WEL Networks Limited has assets in excess of \$1 billion (including all subsidiary companies). Hamilton City is at the centre of our coverage area which extends to Maramarua in the north and across to the west coast. The townships of Huntly, Raglan, Te Kauwhata, and Ngaruawahia are incorporated.

As well as providing a distribution service to our traditional network area, WEL has competitively tendered for electricity distribution services in major subdivisions in New Zealand. We supply subdivisions in Auckland, Cambridge, and Warkworth.

WEL Networks is locally owned with one shareholder: the WEL Energy Trust. The capital beneficiaries are the region's local councils: Hamilton City Council, Waikato District Council, and Waipa District Council.

This Pricing Methodology sets out the approach used by WEL Networks Ltd (WEL) to determine our price structure and set our prices for 2022/23. It has been prepared to meet the requirements of the Commerce Commission's *Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012*, and it has been prepared in accordance with the Electricity Authority's updated *Distribution Pricing: Practice Note December 2021*. In determining our prices, WEL has also had regard to the requirements of the *Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004*, and the consultation requirements in the *Electricity Industry Participation Code 2010 (the Code)*.

The Commerce Commission's ID Determination requires WEL to publicly disclose, before the start of each financial year, a pricing methodology which:

- describes the methodology used to calculate the prices payable or to be payable (sections 6, 7 & 8);
- explains the rationale for customer groupings (section 5);
- describes any changes in prices and target revenues (sections 4, 8 & 9);
- explains the approach taken with respect to pricing in non-standard contracts and distributed generation (sections 10 & 11);
- describes the consistency of the approach taken with the pricing principles and explains WEL's pricing strategy (sections 12 & 13); and
- explains whether and if so how, the views of customers were sought, including their expectations in terms of price and quality, and reflected those views in calculating the prices payable or to be payable (section 14).

This document describes the allocation of costs, and the resulting structure and level of WEL's prices for electricity distribution and transmission services. These prices form only a part of overall electricity prices paid by customers to their electricity retailer. Queries about final consumer prices should be addressed to the applicable retailer.

## 2. DEFINITIONS

Term	Definition
ACOT	Avoided Cost of Transmission – a payment made by WEL to distributed generators who are able to demonstrate they are assisting WEL to avoid additional transmission costs
AMI - Advanced metering infrastructure	A meter that records electricity used in half-hourly values (rather than a cumulative record). Advanced meters have communication features, eliminating the need for physical meter reading. Also known as a 'smart meter'.
AMD	Anytime Maximum Demand – the maximum demand of a customer or group of customers recorded at any time.
CMD	Coincident Maximum Demand – the demand of a customer or group of customers at the time total demand on the network is at its peak
Code	The Electricity Industry Participation Code 2010
DPP	Default Price-quality Path – price-quality regulation set by the Commerce Commission for non-exempt suppliers of electricity lines services
EA	Electricity Authority
EDB	Electricity Distribution Business
External network	An electricity network owned by WEL located outside WEL's traditional network, they are located in Auckland, Cambridge and Warkworth.
GWh	Gigawatt hour
GXP	Grid Exit Point – a point of connection to the transmission network
ICP	Installation Control Point – the customer's point of connection to WEL's network. There is generally a meter at each ICP.
ID Determination	Commerce Act (Electricity Distribution Services Information Disclosure) Determination 2012
kVA	Kilovolt ampere
kWh	Kilowatt hour
MWh	Megawatt hour
Parent network	The distribution network (owned by another EDB) to which WEL's external network is connected.
Pricing principles	The Electricity Authority's Distribution Pricing Principles
SSDG - Small scale distributed generation	Generation installation connected to the distribution network with a nameplate capacity of 10kW or less
TOU	Time of Use – consumption of electricity based on the time of consumption

### **3. OVERVIEW OF PRICING INFLUENCES**

WEL's current cost allocation model is an important factor in setting prices; however it is not simply a mechanical exercise of applying the modelled outcome annually as this could lead to volatility in prices. Other factors that influence our approach to pricing include: ensuring customers do not experience price shocks, ensuring revenue adequacy, and maintaining logical relationships between price categories.

WEL maintains a robust Capital Contributions Policy which is used to economically model new and modified connection applications. This means customers pay their locational economic cost at the time of connection.

Given these considerations, the level of target revenue that is actually collected from a customer group will not necessarily be identical to the level of costs the model attributes to that group. It is WEL's intention that through the pricing revision each year WEL's prices and pricing structure will approximate the modelled revenue allocation, over time, in a way that is consistent with the pricing principles.

WEL has used the Authorities distribution pricing principles to form its pricing methodology. In section 12 we describe the extent to which we consider the resulting pricing methodology is consistent with the pricing principles.

#### **3.1. Distribution Pricing Principles**

##### **1. Prices signal the economic costs of supply**

- a. Prices should be subsidy free (i.e. equal or greater than costs which are avoidable if a customer(s) were not connected, but less than the costs of a customer(s) replicating or bypassing WEL's network)
- b. Prices should reflect the impact of network use on economic costs
- c. Prices should reflect differences in network service (e.g. capacity of connection or agreed interruptibility)
- d. Prices should encourage efficient network alternatives

##### **2. Where prices that signal economic costs under-recover target revenues, the shortfall is made up by prices that least distort network use**

##### **3. Prices are responsive to the requirements and circumstances of end users by allowing negotiation to:**

- a. Reflect the economic value of services
- b. Enable price/quality trade-offs

##### **4. Development of prices is transparent and has regard to:**

- a. Transaction costs
- b. Consumer impacts
- c. Uptake incentives

### **4. CHANGES TO THE PREVIOUS PRICING METHODOLOGY**

The main change to this year's Pricing Methodology compared to the previous year, is the development of an actionable roadmap towards cost-reflective distribution pricing reform.

#### **4.1. Pricing Reform Roadmap**

During the past year, the new Transmission Pricing Methodology (TPM) has neared finalisation, an amendment was passed to allow for Low Fixed Charge (LFC) regulations to be phased out, and the Authority has provided greater clarity around pricing reform expectations (in the form of an updated Distribution Pricing: Practice Note). WEL believes that these factors have created the opportune environment to embark on the next phase of our distribution pricing reform journey.

WEL has produced a roadmap (section 13.2) outlining the initial steps we will take to transition away from our current 'revenue recovery' pricing model, towards a cost-reflective pricing model which uses targeted pricing to signal constraints and recovers all remaining target revenue in the least distortionary manner possible.

A key element of WEL's cost-reflective pricing model will be the development of a new cost allocation methodology. As this new allocation methodology is yet to be developed, we have used our current cost model and allocation methodology for this Disclosure and price setting for the pricing year beginning 1 April 2022.

## 5. CUSTOMER GROUPS

WEL determines customer groups based on the level of service received by the customer. The criteria used for allocating customers to these groups are chosen as proxies for the service level and reflect groupings with distinct demand profiles and associated asset requirements:

- The voltage at which the customer is connected;
- The customer's fuse capacity;
- For small customers (connected at 400V, with a fuse capacity of less than 110 kVA) the principal use of their property and whether they have installed generation capable of exporting into WEL's network; and
- For a customer's principal place of residence, whether the customer has chosen their retailer's low user pricing plan.

WEL considers that these criteria accurately reflect its cost drivers within regulatory constraints.

The following definitions distinguish mass market customers:

A **residential customer** (price category 1153/1154, 1153C/1154C) is a customer or small scale distributed generator with a fuse capacity less than 110 kVA, a connection voltage of 400V or less, and that the connection is for the purpose of supplying electricity to premises that are used or intended for occupation principally as a place of residence, and excludes those premises described in section 5(c) to (k) of the Residential Tenancies Act 1986. These criteria reflect the typical characteristics of a household; customers with larger fuse capacity or higher connection voltage typically require electricity for some other purpose than residential use.

A **general customer** (price category 1200, 1200C) is a customer or small scale distributor with a fuse capacity less than 110 kVA, connection voltage of 400V or less, and is not a residential customer.

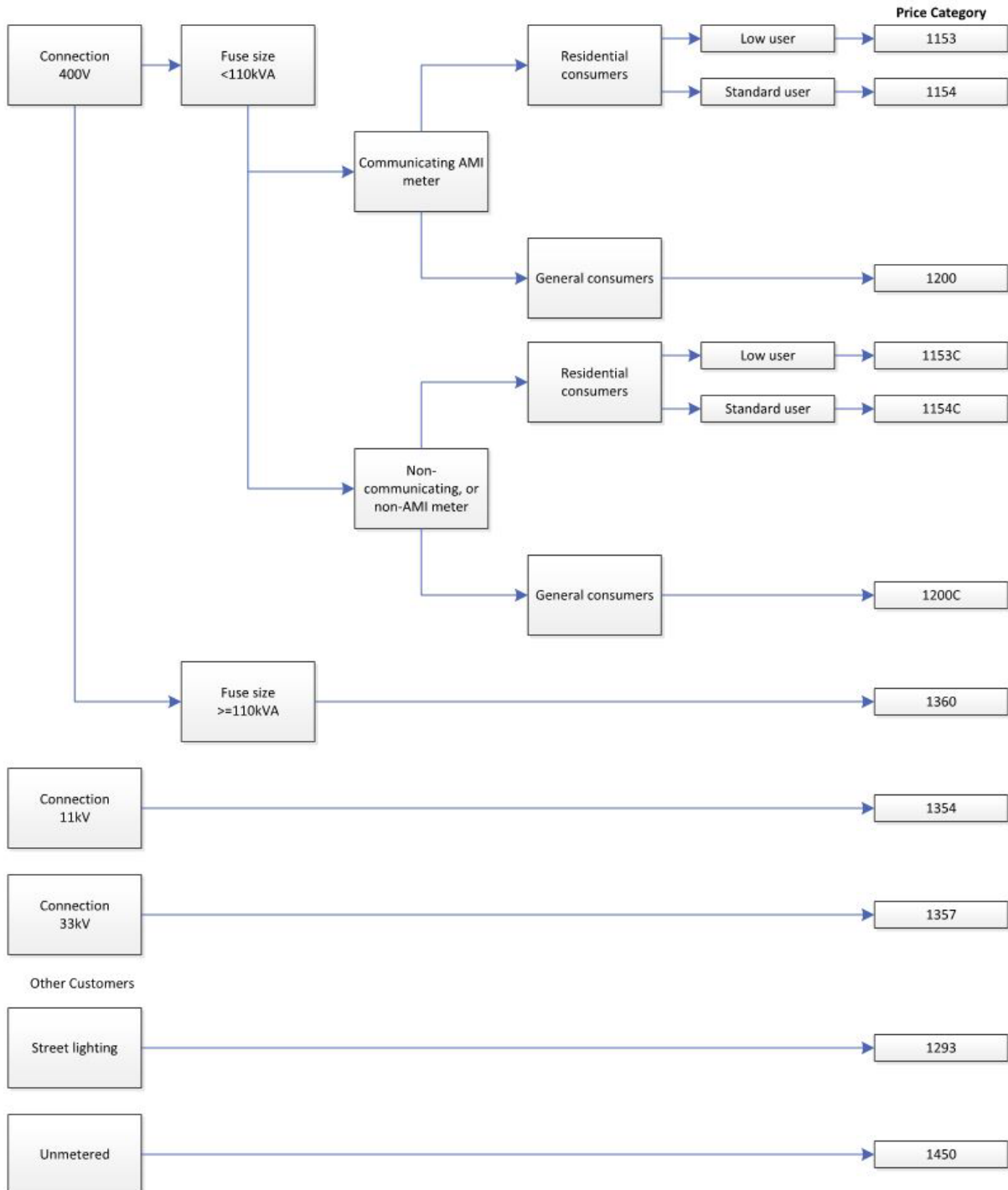
A **low user customer** (price category 1153/1153C) is a residential or small scale distributed generation customer who has nominated the retailer's low user pricing plan and the premises must be the customer's principal place of residence. For the avoidance of doubt, eligibility for low user pricing options excludes holiday homes and buildings that are ancillary to a customer's principal place of residence.

A **standard user** plan (price category 1154/1154C) applies to all other residential (non-low user) and residential small scale distributed generation customers.



The diagram below illustrates the characteristics of each customer group and shows how price categories have been derived:

**Figure 1 - Customer Groups**



### 5.1. Low Fixed Charge Tariff Regulations

The Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 outlines the fixed daily price which electricity distributors must offer residential customers who have opted for a low-user price category. Historically, this price has been capped at not more than 15 cents per day (excluding GST). In December 2021, amendments were gazetted allowing for a gradual phase out of the LFC regulations. These amendments allow WEL to increase the fixed daily price to not more than 30 cents per day (excluding GST) for the year beginning 1 April 2022.

WEL has standard fixed charge categories in addition to the low fixed charge price categories. The variable prices for customers on low fixed charge categories is such that an average customer who consumes 8,000kWh pays no more in total per year on these options than the same customer would on any alternative option that is available to them.

It is a requirement of WEL's price group category criteria that an ICP must be a principal place of residence and the customer must also have nominated the retailer's corresponding low user price plan to be eligible for WEL's low fixed charge price categories.

## 6. PRICE STRUCTURE

WEL's current price structure was designed to reflect the economic costs of providing services to its customers, recognising the varying patterns of consumption from each of the different groups of customers within the network. Some of the costs are fixed, that is they do not vary with the level of output in the short term, and are based on the level of installed capacity; some costs vary depending on consumption patterns.

WEL's price structure is similarly split into fixed and variable prices. Fixed prices are levied on a per day basis. Variable prices are typically based on the volume of electricity used by the customer and for Large Customers also the average of the six highest periods of demand each month (during WEL's network peak time periods) and their nominated capacity. These prices reflect the economic costs pertaining to the customer's time of consumption and demand profile in terms of level of consumption. WEL's Time of Use and peak demand prices reward behaviour (through lower prices at off-peak times) that will help reduce network costs (primarily transmission costs and network investment).

WEL uses a selection of variable prices for each customer group based on the characteristics of the groups economic cost drivers:

- **Uncontrolled Supply Prices:** are prices that apply to electricity supply that is continuously available under normal operating circumstances. Prices may be time of day dependent. The price is multiplied by the volume of energy used, measured in kilowatt hours (kWh), in the corresponding time periods. This is applicable to anytime or across peak, shoulder and off-peak prices. Where prices are applied based on peak, shoulder and off-peak time periods, WEL offers lower prices for consumption when there is expected to be spare capacity on the network (i.e. off-peak).
- **Controlled Supply Prices:** are prices that apply to the electricity supply that is capable of being interrupted (switched off) by WEL using remote technology for up to eight hours a day. The price is multiplied by the volume of energy used, measured in kilowatt hours (kWh). The ability for WEL to reduce peaks by controlling load (i.e. switching off supply) is valuable to WEL, and this is reflected in lower prices for supply to controllable load. This type of supply is typically connected to hot water cylinders and other appliances nominated by the customer. To be eligible, this supply must be metered separately from any uncontrolled supply. Combined metered supplies (uncontrolled and controlled) will be charged at the uncontrolled price.
- **Peak Demand Price:** A price that is applied based on the average of the six highest recorded demand (kVA) periods by a Large Customer in six individual half hour periods during WEL's peak periods each month. There is a price for the winter months (1 May to 30 September) and a price for the summer months (1 October to 30 April).
- **Reactive Energy Price:** The reactive energy price is only applied to Large Customers and non-standard contract connections. It is charged on the volume of reactive energy (kVARh) used when the customer's

power factor is less than 0.95 within a half hour time period. A low power factor requires a greater supply of reactive energy, which increases the need for network capacity.

- **Capacity Price:** A capacity price is applied to the nominated capacity (kVA) for Large Customers and non-standard contracts. Customers with higher capacities represent a larger requirement for investment in network assets to ensure the stability of the network. The capacity charge is designed to ensure equitable distribution of this extra investment cost.
- **Excess Demand Price:** An excess demand price is applied when a Large Customer exceeds their nominated capacity in any half hour during the billable month. The excess demand charge is to ensure customers nominate accurately and customers' charges reflect their fair use of the network.
- **Transformer Rebate:** A transformer rebate is paid to medium (11kV) and high voltage (33kV) customers who own their own transformer(s) to reflect the reduced cost to WEL to supply that customer. This rebate is applied to demand recorded in a meter and is represented as a rebate (\$) per kVA per month.

## 7. COST MODEL

The key purpose of the cost allocation and design model is to ensure that the prices for each customer group reflect the economic cost of serving that group. This section outlines this allocation process and the rationale for the choice of cost allocators.

The model allocates each cost category (Table 2) to customer groups based on the chosen allocator (Table 1). These costs are aggregated to give modelled revenue for each customer group. This is used to derive a set of model prices for each customer group (comprising fixed and variable prices). WEL uses these prices as the basis for final prices.

WEL reviews the price changes as indicated by the cost model against the pricing principles taking into account the undesirability of price shocks, the need to ensure revenue adequacy (and mitigate revenue risk) for WEL, and the desire to maintain logical relationships between price categories prior to settling on the final price changes.

The final prices and forecast volumes are then combined to derive target revenue for each customer group (Table 5).

### 7.1. Method of Cost Allocation

The choice and application of cost allocators involves a degree of judgment. The cost allocation and price design model allocates costs to customer groups based on WEL's assessment of customer influences on investment, maintenance, service, and Transpower costs. WEL also monitors prices of other EDBs to ensure that WEL's prices are broadly aligned with industry norms.

Utilisation of assets provides a useful basis for allocating many of our costs. Assets are allocated to different customer groups depending on their point of connection to the network. So, for example the low voltage asset costs are not allocated to high voltage customers.

WEL focuses on matching an allocator to each of its cost categories in a manner that best reflects the pricing principle that prices should reflect the economic costs of supply, subject to the availability of information, administrative simplicity, and regulatory constraints

The table below describes the allocators that WEL uses in its cost allocation and price design model. Anytime maximum demand (AMD) and coincident maximum demand (CMD) are both measures of asset utilisation. AMD provides information about the capacity of assets required by a specific customer group at any time, while CMD measures the customer group's contribution to the network peak – it is this coincident peak demand that typically drives investment in capacity.

**Table 1 Description of Cost Allocators**

Allocator	Description	Formula
Energy	The annual consumption of all customers in that group as a proportion of the total.	$\frac{MWh_c}{MWh_{total}}$
AMD	Measures the anytime maximum demand (AMD) of a customer group as a proportion of the total. AMD may occur in different time periods for different customer groups. An allocation is made to customer groups based on the design capacity of the network.	$\frac{AMD_c}{AMD_{total}}$
CMD	The proportion of total demand related to a group of customers at times of coincident maximum demand (CMD). CMD is based on the average of the 12 highest total demands within a half hour time period on the network over one year. Contribution to CMD is measured for large and asset specific customers at each GXP and the residual measured demand at each GXP is allocated to mass market and unmetered customers.	$\frac{CMD_c}{CMD_{total}}$

Note: c = Customer Group

The table below outlines each cost category, the allocator used by WEL to allocate that cost to customer groups and the rationale for choosing that allocator. The allocator with the strongest relationship to cost causation has been used.

**Table 2 Rationale for the Choice of Cost Allocator for Each Key Component of Revenue**

Key component	Allocator used in cost model	Rationale
Net profit after tax	CMD	Net profit after tax is allocated on the basis of the investment caused by each customer group (their contribution to the network peak). This reflects the significance of the assets on which a return is sought.
Maintenance	AMD	WEL considers that the incidence of maintenance costs is best represented through customers' contribution towards the assets' overall utilisation. Maintenance costs are first attributed to the low, medium, and high voltage network, then the cost of each part of the network is allocated based on AMD.
Depreciation	CMD	Depreciation accounts for the cost of assets. These costs are therefore allocated based on the investment driven by each customer group (their contribution to the network peak). Depreciation costs are first attributed to the low, medium, and high voltage network, then the cost of each part of the network is allocated based on CMD.
Operating expenditure	CMD	WEL's operating expenditure includes staff and lease costs, printing, postage, rates, and motor vehicle expenses. These costs are allocated based on CMD as WEL's cost structure is largely fixed and related to network capacity. Costs are then allocated based on the customer group's contribution to the annual maximum demand on the network.
Tax & Interest	CMD	Allocated on the same basis as net profit after tax, as tax is directly related to profit.
Electricity Authority and Commerce Commission levies	Energy	These levies are based on the volume of energy distributed; this allocator therefore reflects the basis of the charge.

Transpower – interconnection and avoided transmission	CMD	Allocating this cost based on the share of coincident peak demand is similar to the basis on which Transpower sets its interconnection costs – which is regional coincident peaks.
Transpower – excl. interconnection and avoided transmission	AMD	Transpower levies connection charges on the basis of anytime maximum demand at a connection location. WEL has chosen to use the same allocator.

## 7.2. Discount

WEL operates an annual discount scheme. In terms of disclosure requirements, the discount must create a firm commitment by WEL, prior to the beginning of the annual pricing year, to paying a discount after that pricing year has ended. For transparency and compliance, WEL includes this commitment as part of our Published Price Schedule and the Pricing Methodology disclosure.

The rationale for the discount scheme is that WEL Energy Trust (the owner of WEL Networks) asked WEL to investigate options for reinstating an annual discount. The methodology that has been adopted ensures WEL publishes a firm commitment to pay a discount, but basing the discount on a percentage of lines revenue gives WEL some flexibility in the case of an unforeseen economic downturn affecting WEL’s ability to pay a fixed amount.

The discount for the pricing year 1 April 2022 - 31 March 2023 is 10.6% of gross lines revenue, up to a maximum of \$12.275M (excluding GST). The discount will be calculated based on each eligible connection. To be considered eligible, a connection must be active and non-vacant as at 5pm 31 March 2023.

The discount will be calculated based on a percentage of each eligible connections’ total lines charges for the 12 months from 1 April 2021 - 31 March 2022, subject to a maximum cap of \$200 (excluding GST) per connection.

WEL is committed to pay a discount of 10.6% of gross lines revenue, up to a maximum of \$12.275M (excluding GST), based on a percentage of the previous 12 months of each connections’ lines charges, up to a maximum cap of \$200 (excluding GST) per connection.

The discount is forecast to be paid at the latest, in early FY24.

## 8. KEY STATISTICS AND ASSUMPTIONS

The tables below represent the breakdown of WEL’s Target Revenue for 2022/23 into key cost components, by customer groups and by each of the price components as published in the 2022/23 Price Schedule.

WEL’s target revenue is based on achieving a return on investment over the medium term (five years) that is based on the 67<sup>th</sup> percentile estimate of WACC determined by the Commerce Commission for the default price-quality path.

Note – The data in the tables below represents the information used at the time of setting the prices for 2022/23 pricing year.

**Table 3 Target Revenue by Key Cost Components (\$000)**

Key Cost Component	\$000
Net profit after tax (NPAT) <sup>1</sup>	-\$831
Tax	\$2,729
Interest	\$6,320
Maintenance	\$9,929
Depreciation	\$30,479
Operating expenditure	\$37,999
Transmission – interconnection	\$18,829
Transmission – connection	\$4,801
Avoided transmission	\$5,359
Electricity Authority and Commerce Commission levy	\$540

<sup>1</sup> NPAT is the net profit after the payment of interest and tax

<b>Gross Revenue</b>	<b>\$115,614</b>
Discount	-\$12,275
<b>Total Target Revenue</b>	<b>\$103,339</b>

**Table 4 Share of Allocators by Customer Group**

<b>Connection</b>	<b>Energy</b>	<b>AMD</b>	<b>CMD</b>
400V <110kVA	59.3%	76.2%	75.7%
400V >= 100kVA	17.8%	11.4%	10.5%
11kV	19.1%	10.7%	11.8%
33kV	0.8%	0.3%	0.9%
Streetlighting	0.6%	0.1%	0.3%
Unmetered	0.0%	0.5%	0.0%
Non-Standard	2.4%	0.7%	0.8%

**Table 5 Target Revenue by Price Component and Customer Group (\$000)**

Price Component (\$000)	Time of Use Pricing			Conditional Pricing			Low Voltage	Medium Voltage	High Voltage	Streetlights	Unmetered	Non-standard contacts	Total	Proportion of Target Revenue
	Residential Low User	Residential Standard User	General	Residential Low User	Residential Standard User	General								
Fixed	5,301	13,567	4,993	324	1,114	1,336	1,166	275	3	1,308	28	234	29,649	28.7%
Uncontrolled Supply	-	-	-	1,192	1,020	2,597	-	-	-	-	5	-	4,814	4.7%
Controlled Supply	2,343	332	321	132	25	53	-	-	-	-	-	-	3,206	3.1%
Off Peak	3,916	1,935	2,080	-	-	-	-	-	-	-	-	-	7,931	7.7%
Shoulder	9,595	6,166	7,947	-	-	-	-	-	-	-	-	-	23,708	22.9%
Peak	6,164	5,344	4,204	-	-	-	-	-	-	-	-	-	15,712	15.2%
Generation Export	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%
Default	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%
Capacity	-	-	-	-	-	-	5,152	4,531	86	-	-	286	10,055	9.7%
Summer Peak	-	-	-	-	-	-	5,154	3,719	86	-	-	356	9,315	9.0%
Winter Peak	-	-	-	-	-	-	5,870	4,535	89	-	-	349	10,843	10.5%
Reactive	-	-	-	-	-	-	200	206	-	-	-	-	406	0.4%
Transformer rebate	-	-	-	-	-	-	-	22	3	-	-	-	25	0.0%
Discount	- 4,725	- 4,767	- 1,653	- 272	- 335	- 327	- 146	- 35	- 0	- 7	- 6	- 1	- 12,275	-11.9%
<b>Total</b>	<b>22,594</b>	<b>22,577</b>	<b>17,892</b>	<b>1,376</b>	<b>1,824</b>	<b>3,659</b>	<b>17,396</b>	<b>13,209</b>	<b>261</b>	<b>1,301</b>	<b>27</b>	<b>1,224</b>	<b>103,339</b>	<b>100%</b>

## 9. PRICE CHANGES

This section describes the key changes to prices between those that were applicable between 1 April 2021 and 31 March 2022, and those that apply from 1 April 2022. The rationale for these changes is provided along with a measure of the significance of the change by consumer group below.

The following changes to WEL's network prices are effective 1 April 2022:

- Low user plans (1153 & 1153C) - Fixed daily pricing increased to \$0.30 per day, variable pricing proportionally decreased
- Standard plans (1154 & 1154C) - Variable pricing decreased to maintain compliance with LFC regulations
- General plans (1200 & 1200C) - Fixed daily pricing increased to \$1.35 per day, variable pricing proportionally decreased
- Large capacity plans (1360, 1354 & 1357) - Capacity pricing increased to \$0.1280 per kVA per day, Excess demand pricing increased to \$0.6400 per kVA per day, peak demand pricing proportionally decreased

All pricing changes listed above have been calculated to be revenue neutral, on average, for each customer group.

**Table 6 Average Price Changes by Consumer Group**

Connection	Price Change
400V <110 kVA	0.0%
400V >=110kVA	0.0%
11kV	0.0%
33kV	-1.1%
Street lighting	0.0%
Unmetered	0.0%
Non-standard	-0.9%

### 9.1. Change in Target Revenue

WEL is forecasting target revenue to increase by 5.1% in 2022/23 compared to the 2021/22 budget. This reflects an overall 0% change in network prices, along with increased growth experienced during the 2021/22 year and forecasted consumption and ICP growth for 2022/23.

Table 6 indicates price decreases (in percentage terms) for 33kV and non-standard consumer groups, but no price change for all other consumer groups. This is due to the minor variances from (largely revenue neutral) reallocations of costs within some price categories, only being visible at one decimal place in consumer groups which recover a lower proportion of revenue.

## 10. NON-STANDARD CONTRACTS

Asset-specific pricing is available to large customers on a case-by-case basis. We currently have three customers (4 ICPs) who have asset-specific pricing agreements. The agreements are generally established when a customer approaches WEL to connect to the network. Where a large capital contribution would be required to install the connection, WEL may negotiate with the individual customer to determine a price (such as a monthly fixed price) that is economically equivalent to the capital contribution that would otherwise be required. This approach allows the customer to pay for the asset over a longer period that better reflects the value that they derive from it. Also, where there is a risk of an uneconomic bypass, WEL will negotiate pricing arrangements that reflect the customer-specific cost of supply.

This approach is consistent with the pricing principles as the prices reflect: the economic cost of service (principle a), and is responsive to the requirements and circumstances of end users (principle c).

WEL does not offer non-standard terms on service interruption to any customers.

## 11. DISTRIBUTED GENERATION

WEL has a range of distributed generation (DG) connected to its network from residential solar installations up to grid-scale windfarms. Applications to connect distributed generation are treated in accordance with Part 6 of the Code. During the past 12 months, WEL has experienced a significant increase in the quantity, and especially the size, of DG applications to connect to the network. The assessment process for large-scale DG applications has revealed



that of Part 6 is no longer fit-for-purpose; WEL has utilised recent regulatory consultations to highlight the shortcomings of Part 6 to the Authority.

WEL has established price codes for exported generation for most price categories (exported generation is not relevant for streetlighting or unmetered connections). These price codes are set to zero dollars per kWh and are used primarily to monitor the quantity of generation being exported into the network.

Due to a Code amendment in 2016, WEL is required to continue to compensate two large grid-scale generators who demonstrate (on an annual basis) that they are assisting WEL to avoid transmission costs. The compensation paid is equal to the costs WEL avoids by having their generation injected directly into the network and is commonly referred to as an avoided cost of transmission payment (ACOT). The compensation is calculated using Transpower's current interconnection charges, but is based on each generators performance in the immediately preceding year. During 2022/23 payments of \$5.4 million (excluding GST) are forecast.

## 12. CONSISTENCY WITH THE ELECTRICITY AUTHORITY'S DISTRIBUTION PRICING PRINCIPLES

WEL's pricing methodology is based on its interpretation of the Authority's pricing principles and other factors outlined in Section 3. We have highlighted through the methodology, where and how the pricing principles have influenced the choices WEL has made. This section sets out the Authority's principles (in the boxes), reiterates WEL's interpretation and application of them, and outlines the extent to which the price design and cost allocation methodology are consistent with the pricing principles. WEL's purpose in simplifying the pricing principles is to aid our customers' understanding. This simplified statement of the principles is not intended to reduce their scope in any way.

- (a) Prices are to signal the economic costs of service provision, including by:
- i. being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);
  - ii. reflecting the impacts of network use on economic costs;
  - iii. reflecting differences in network service provided to (or by) consumers; and
  - iv. encouraging efficient network alternatives.

WEL has simplified this principle to 'prices signal economic costs of supply'. We interpret this to mean that:

- WEL's prices should reflect the level of service available, including the capacity and interruptibility of the customer's connection and the associated demand on the network which are the primary drivers of WEL's costs. The cost allocators have been chosen on the basis that they are a good reflection of this pricing principle. WEL uses demand, capacity and consumption measures as cost allocators (see section 7.1) and these (demand and capacity in kVA, and consumption in kWh) are the basis of WEL's variable prices.

The incremental cost of a customer group is the cost of the additional capacity required to serve that group given that all other customers on the network are already being served. Incremental costs provide a lower bound to prices as WEL would be better off to stop supplying customers who are not meeting their incremental cost. A price below incremental cost also encourages an inefficiently high level of consumption. In times of spare capacity on the network short-run average incremental cost is close to zero.

Standalone costs provide the upper bound to prices as this is the total cost of providing a service to a customer group assuming no other customers are being served. If prices exceed standalone costs the customers would be better off bypassing the network. The incentives attached to pricing outside these bounds (uneconomic supply on one hand and loss of customers who bypass the network on the other) ensure that WEL's prices remain between these costs.

- (b) Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.

WEL has simplified this principle to 'shortfalls in target revenue should be made up from prices that least distort network use'. This principle is intended recover residual costs (to make up target revenue) from fixed charges (or other non-distortionary charges) after variable charges have recovered the economic costs of connections. WEL

endeavours to meet this principle from Large Customers and non-residential connections. However, this principle is difficult to realise for residential connections as efficient pricing is hampered by low-user fixed charge regulations. These regulations prevent WEL from allocating residual charges to these connections in a way that does not distort network use.

- (c) Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:
- i. reflect the economic value of services; and
  - ii. enable price/quality trade-offs.

WEL's simplified statement of this principle is that 'prices should be responsive to stakeholder requirements and circumstances'. Where a new connection requires a large capital investment, WEL may negotiate an asset-specific price with the customer. This non-standard arrangement allows the customer to pay for the asset over a period that reflects the value they derive from it, and is consistent with this pricing principle. WEL's price structure also reflects the economic costs of mass market customers with mandatory Time of Use pricing and larger commercial and industrial users through the use of peak demand prices.

- (d) Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives.

WEL considers that to achieve "pricing development which is transparent" stakeholders should know WEL's strategies, price design, cost allocation methodologies, and any price changes in advance of them applying, and should be able to easily identify the price(s) that apply to individual consumers. WEL considers that the publication of this document and our price schedules contributes to this. WEL is committed to continuing to improve our communication of our pricing design to stakeholders.

WEL has chosen to unbundle its costs into broad categories, and use a limited number of allocators to allocate the cost categories to customer groups. This ensures that our approach is relatively easy to understand, and administrative and transaction costs are kept in check, reflecting this principle.

A notable aspect of this pricing methodology is the adoption of targeted and glide path (i.e. phased) adjustments. WEL considers this approach to be consistent with the principle, as it assesses consumer impacts before implementing any changes.

WEL works with retailers to ensure alignment of pricing structures and incentives are maintained.

### 13. PRICING STRATEGY

WEL's pricing strategy (originally developed in 2012) was updated in 2016 to more closely reflect WEL's future direction for pricing whilst still showing our commitment to innovation and improving our pricing structure to reflect the economic value of services and create customer benefits; it is:

*Prices and price structure changes shall incorporate WEL's Pricing Principles and improve cost reflectivity whilst taking into account customer impact. Prices should provide consumers with options, enhancing utilisation of new technologies and efficient use of the electricity system. WEL is committed to customer and stakeholder engagement including consultation and education.*

WEL will continue to monitor its price strategy and its application to the changing market conditions and consumer needs.

#### 13.1. Key Objectives of WEL's Pricing Strategy

Key objectives of WEL's Pricing Strategy are listed below; these objectives are consistent with the pricing principles.

1. **Cost-Reflective Pricing:** ensure that pricing and pricing design reflect the cost drivers of supply to individual consumer groups e.g. increase the utilisation of capacity, time of use or demand based charges over time subject to public education and communication plans. This is consistent with signalling the economic cost of service provision (principle a);
2. **Clear Pricing Structure:** pricing should be simple and easy to understand by customers and accessible to new traders. This is consistent with transparent pricing development (principle d) and promotes retail competition in WEL's network;
3. **Customer Focus:** engagement with customers including consultation and education on pricing and pricing plans. The management of price shocks in the transition to new price structures. Negotiation to customer specific circumstances. This is consistent with responsiveness to end users requirements (principle c); and
4. **Incentivise Efficient Adoption of Network Alternatives:** pricing and price structures should signal the economic cost of supply to encourage the efficient adoption of new technologies. This is consistent with signalling the economic cost of service provision (principle a & d).

### 13.2. Work Undertaken to Date and Pricing Reform Roadmap

#### Work Undertaken to Date

In April 2016 WEL implemented mandatory TOU pricing for new ICPs on Residential, General and SSDG price plans, referred to as 'Smart Pricing'. WEL's Smart Pricing consisted of three time periods (Peak, Shoulder, and Off-Peak) with peak timeframes aligning to WEL's system peak times.

During 2017 WEL undertook customer focus groups and consulted with Retailers on potential future pricing options (detailed in the ENA's New Pricing Options for Electricity Distributors) for Residential, General and SSDG customers. Of the future options given, Time of Use was preferred as it was transparent, understandable, and actionable. WEL advised Retailers in December 2017 of the transition of mass market ICP's onto Time of Use pricing. A default rate was also implemented (for a limited time) as some retailers were unable to provide time banded data. For Large Commercial customers WEL changed peak charges to be based on KVA not KW and introduced capacity charge and excess demand charges through reducing kWh charges with the view to eventually remove them.

In 2019, WEL undertook a retailer consultation to update and simplify the pricing schedule. The result was to discontinue SSDG (1250, 1251, 1250C, and 1251C) price categories and to migrate those ICPs onto the appropriate remaining price categories (1153, 1154, 1200, 1153C, 1154C, and 1200C). In order to maintain visibility of exported generation from SSDG, exported generation price codes were added to most remaining price categories.

In 2021 kWh charges for Large Commercial customers were phased out.

#### Pricing Reform Roadmap

During the past year, the electricity distribution sector has experienced significant development: the long running Transmission Pricing Methodology (TPM) review seems set to conclude with a new TPM to be implemented on 1 April 2023, the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 have been amended to allow LFC options to be phased out by 1 April 2027, and the Authority has published a pragmatic and compelling update to their Distribution Pricing: Practice Note. WEL believes the timing of the new TPM and the phase out of LFC obligations creates an opportune moment to significantly reform distribution pricing and transition towards the cost-reflective pricing model (CRPM) advocated in the Authority's December 2021 Distribution Pricing: Practice Note.

Transitioning to this new CRPM is a significant change for WEL, and although it will take time to develop and implement, it is a change WEL is committed to making.

Our first step towards developing a pricing reform roadmap, was to complete a comprehensive review our current pricing model. This was critical to understand the gaps in our current thinking and how much our overall methodology would need to change; it became clear that our pricing model would need an extensive overhaul to achieve our goals. WEL's current pricing model is an outdated methodology whereby target revenue is allocated to consumer groups and then recovered via fixed and variable pricing from each group.

The CRPM WEL intends to develop will be based on the modern interpretation of cost-reflectivity. Once developed, WEL's CRPM will use price signalling to indicate the impact that an additional marginal unit of energy will have on the network. After revenues have been recovered from economic price signalling, all remaining revenue required for WEL to recover our target revenue, will be allocated across consumer groups to be recovered in the least distortionary manner possible.

In order to develop a robust CRPM, we need to better understand how and when network constraints will lead to additional network investment. To achieve this, during 2022 we are enlisting WEL's Asset Management team to translate current, and predicted, network constraints into locational economic cost estimates. This work will allow us to begin to restructure our variable pricing to accurately signal the economic cost of service. Part of this work will involve investigating the feasibility of locational targeted pricing.

Although we are hoping that we will have the new CRPM developed in time for the next pricing year (1 April 2023), it must be acknowledged that it will take many years to fully transition to. The most significant bottleneck when transitioning to the new CRPM will be managing price shocks for customers. Recovering residual revenue in the least distortionary manner is still likely to result in proportionally higher charges for lower variable use customers; as a community owned distributor, WEL must take this into account.

Another barrier when transitioning towards the new CRPM will be the LFC regulations. Although LFC regulations are to be phased out by 1 April 2027, the small \$0.15 increases to allowable daily fixed charges each year, coupled with the existing obligation for a pivot point between plans at 8,000kWh per annum, and restrictions on tiered pricing options, will all limit how quickly we are able to transition to residual revenue recovery as our main pricing mechanism.

Our aim is to provide further clarity on the implementation timeline of our CRPM once it has been developed and evaluated. Additionally, will begin to post periodic updates regarding our pricing reform journey. These updates will be available on our website and a copy emailed to the Authority as they become available.

## **14. CONSULTATION**

### **14.1. Customer Consultation**

WEL has a strong customer focus as it is owned 100% by the WEL Energy Trust, on behalf of the community. In addition to the WEL Energy Trust representing the views and interests of customers, WEL regularly consults with major customers and periodically conducts surveys of customers' expectations on its pricing and quality of service. The survey results are a key input into both WEL's Asset Management Plan (AMP) and our Pricing Methodology.

WEL had scheduled to perform an updated customer survey during early 2020 but this was postponed until March 2021 due to the unforeseen events of Covid-19.

The key finding from the March 2021 customer survey was that the majority of the customers (99%) are satisfied with the current level of reliability of supply. Only 29% of customers surveyed would like to see further improvement in reliability of supply, however 75% (of the 29%) would not be willing to pay more for it.

### **14.2. Retailer Consultation**

Clause 12A.7 of the Code requires WEL to consult with retailers prior to making a change to our price structure. No structural changes are to take place this year. However, WEL did consult with retailers between August-October 2021, regarding a possible structural change. The valuable feedback received from retailers led to a solution which did not require a structural change to our pricing.

## 15. CERTIFICATION

### Schedule 17 – Certification for Year-beginning Disclosures

Pursuant to clause 2.9.1 of the Electricity Distribution Information Disclosure Determination 2012.

We, Rob Campbell and Carolyn Steele, being directors of WEL Networks certify that, having made all reasonable enquiry, to the best of our knowledge:

- a) The following attached information of WEL Networks prepared for the purposes of clause 2.4.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.
- b) The prospective financial or non-financial information included in the attached information has been measured on a basis consistent with regulatory requirements or recognised industry standards.



Rob Campbell  
Director



Carolyn Steele  
Director

Date: 28 February 2022